



# HP TECH

## FRUIT, VEGETABLES AND SAUCES

### WHAT IS HPP?

High Pressure Processing (HPP) is a non-thermal treatment, using only pure water and pressure, that extends the shelf-life of vegetables, fruit and dip sauces, while keeping their freshness, nutritional value and taste intact. The water pressure up to 6000 bar eliminates spoilage and pathogenic microorganisms, increasing the shelf-life up to 10 times compared to the untreated product, without the use of preservatives.

### BENEFITS

HPP technology is especially adapted to protect the characteristics of plant foods such as fruit, vegetables and dip sauces (guacamole, hummus etc.)

As the product is not heated, taste and appearance remain as good as the fresh product, protecting all vitamins, antioxidants and other bioactive components.

In the last two decades HPP has become the leading treatment to satisfy the growing customer demand for safe, high quality, minimally processed and additive-free products.

Eliminating the chemical preservatives, HPP meets the increasing consumer request for clean label products and contributes to reducing food waste.

### WHAT DOES IT MEAN?

- **ADDITIVE-FREE**  
Freshness lasts longer without any additive or preservative
- **SAFE AND COMPLIANT**  
Meets the strictest food safety requirements all over the world
- **LONGER SHELF LIFE**  
Allows the positioning of the products in new export markets
- **HIGH QUALITY**  
Minimally processed products with high nutritional value



### PROCESS

With HPP the products are processed in their final packing material, therefore avoiding any potential cross contamination. Packaging must be flexible; glass and metal container are not suitable.

The most frequently used materials are PET, PP, PE, PA or EVOH alone or combined in different layers, as well as more environmentally friendly alternatives such as recycled PET or PLA.

Packaged products are inserted in a basket which is automatically transferred in the High Pressure Vessel. The vessel is filled with water and the pressure is increased up to 6000 bars. Now the cold pasteurization treatment takes place. After a couple of minutes, the pressure is released and the water is drained. The products are now HPP treated and ready to be sold on the market.

## PRODUCTS FOR HPP

Fresh Salsas • Salad Dressing

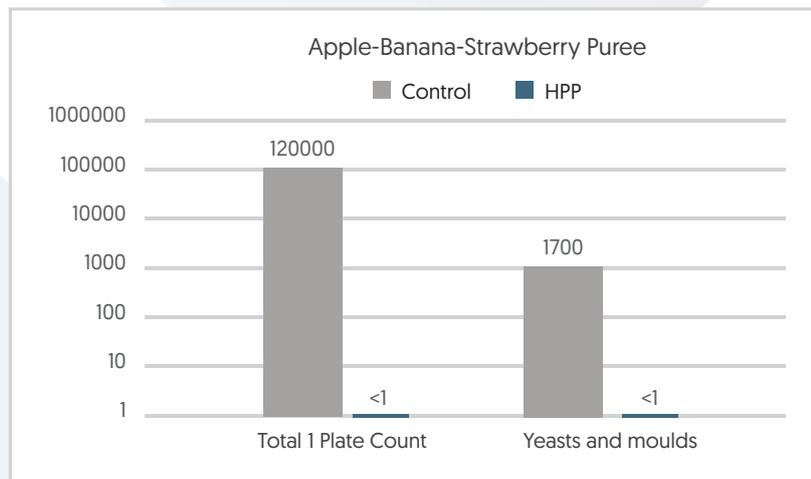
Wet Salads • Vegetables Based Rte Meals

Fruit Based Products (sugar free fruit jams and marmelades)

Fruit Puree • Dip Sauces (hummus, guacamole)



The effect of high pressure processing on degradation of the total viable count and yeasts and moulds in apple-banana-strawberry purée



## WHAT ARE THE ADVANTAGES OF HPP?



**HIGH QUALITY**

Sensorial, nutritional and functional properties of food are preserved



**HIGH PROTECTION**

HPP ensures food safety through the complete reduction of pathogenic microorganisms and bacteria, in compliance to the strictest regulation in the world.



**HIGH PERFORMANCE**

Thanks to shelf life extension, HPP allows the positioning of innovative products in new markets, facilitating geographic growth and improving production schedules.